

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



2.29  
RETURN TO POMOLOGY  
SECTION OF NOMENCLATURE. 1917

FEB 9 1917

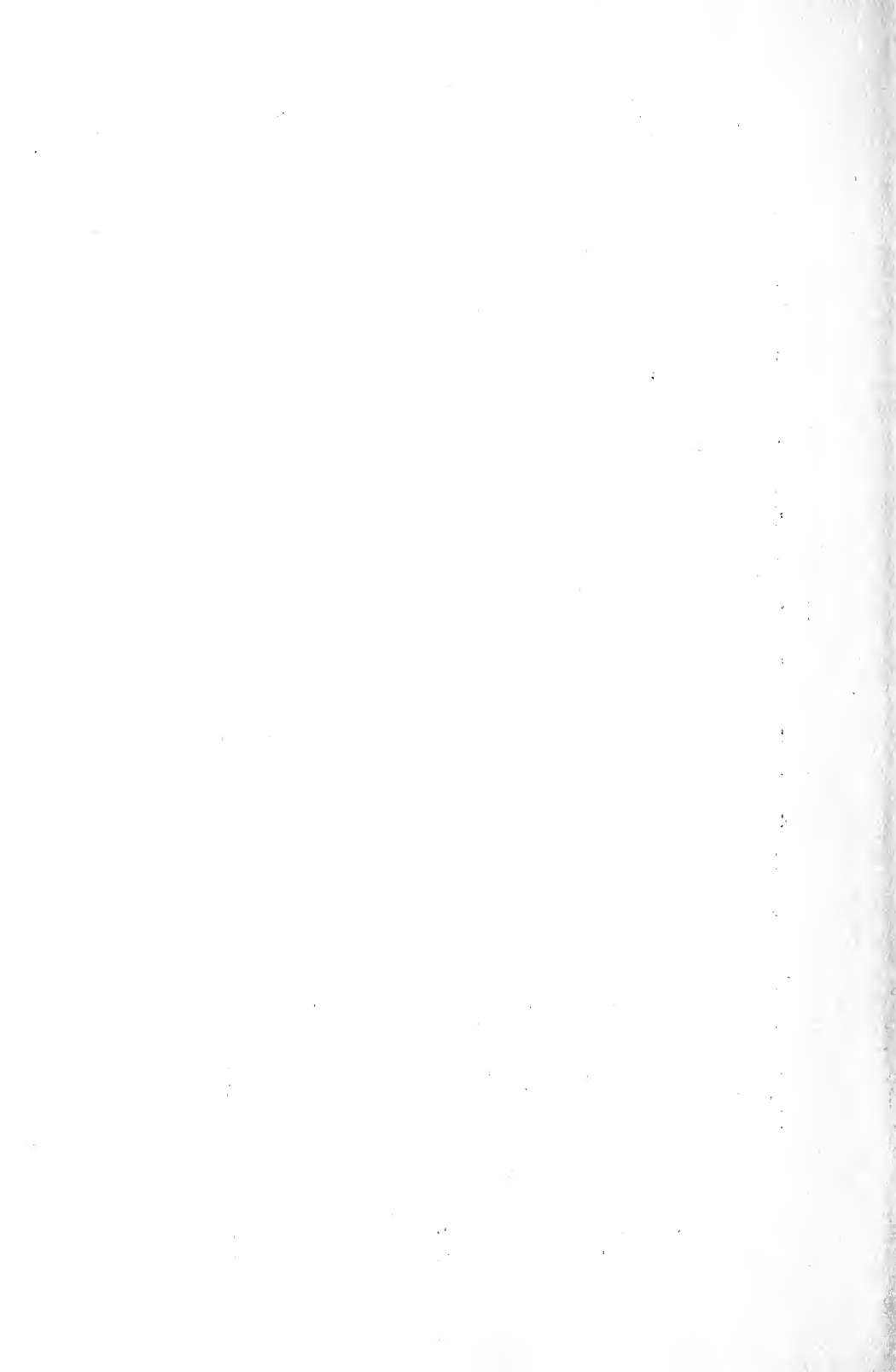
INDEXED.

JUL 8 1920

# COOPER —AND— ROGERS

N  
U  
R  
S  
E  
R  
I  
E  
S

607 NORTH MAIN STREET  
WINFIELD :: KANSAS



FEB 5 1917

## Announcement

In issuing this Catalog it has been our intention to describe the different varieties and kinds of fruit as they are found in this climate. Many varieties successfully grown in the extreme north and east are a complete failure here, and with our many years observation and experience we hope to aid our customers in the selection of varieties that will prove satisfactory in all respects. We do not rely upon the "ready made" catalog that is frequently used, but prefer to describe the different varieties as we find them.

We know of no other location where all sorts of Nursery Stock can be more successfully grown than here, as our land and climate seem particularly adapted to growing fine, well-rooted, smooth and healthy trees of all kinds.

We wish to thank our many customers who have made the past years prosperous ones for us, and to assure them, as well as others who may be interested, that we shall continue to deliver only goods of the very best quality.

### NOTICE TO CUSTOMERS

**QUALITY and PRICE:** While you will find prices very low, we do not sacrifice the quality. We pride ourselves that none of our competitors deliver better stock than we do.

**MAIL ORDERS.** In ordering by mail, give plainly your postoffice and also point to which you want stock shipped. Place your order as early as possible, for we do not substitute varieties and very late orders may find us out of some varieties which you particularly want.

**TIME OF SHIPMENT:** This depends very much upon the season. Trees cannot be delivered in the fall until ripened by frost. Customers' interest and ours are mutual in this respect.

**PACKING FACILITIES:** Our packing house and storage cellars being located but a short distance from our nursery field, our trees are not injured by long exposure to the sun, wind and cold, after being dug, but reach our customers in perfect condition. Each order goes out either boxed or packed in paper lined burlap bale.

**INSPECTION CERTIFICATE:** Copy of certificate of inspection with each shipment.

**TRUE TO NAME:** We are very careful about labeling and packing, but should any mistake occur and stock prove untrue to name, we will be liable for amount originally paid for said stock, or replace same free of charge. Orders are sold on these conditions.

**CLAIMS:** If for any reason there is something in your order that is not entirely satisfactory, kindly notify us at once. We expect to sell goods in the same localities year after year, and to do this we must have satisfied customers.

**SHIPPING FACILITIES:** We have the Santa Fe, Southern Kansas, Frisco and Missouri Pacific railways. Trains in all directions daily. No city in the west has better shipping facilities.

**PURE BRED—KNOWN PARENTAGE:** We secure our scions and buds from hardy, thrifty, bearing trees, that produce good crops. In this way we not only know absolutely that our trees will be true to name, but that they will produce unusually good crops of fruit of high quality. This method insures more vigorous trees, that will bear younger and produce better crops than under any other method of propagation. We consider this feature of the utmost importance and it should not be overlooked. While it costs us more, we feel that it is economy in the long run.

**OUR NURSERY NOT IRRIGATED:** We do not irrigate our nursery fields, as we consider a tree grown under natural conditions far better than one with a forced, spongy growth, as is produced under irrigation. We are confident that the trees grown under the usual climatic conditions, with the hardy, firm, solid growth will prove much better than those grown under irrigation.

**VARIETIES NOT LISTED:** If you do not find listed in our catalog some varieties in which you are particularly interested, write us. We are continually trying out and adding new varieties, but do not catalog them until we have thoroughly investigated same.

## APPLES

The first fruit in importance is the apple. It is unsurpassed as an article of food and commerce. The varieties to be chosen are governed largely by the use. The home orchard should contain both "cooking" and "eating" varieties. By making a judicious selection a constant succession of fresh apples may be had from early summer till spring, or almost till apples come again. And a moderate home orchard will supply an abundance.

The apple grows best in a deep, rich soil, such as would produce good corn or potatoes. Almost any soil that is not wet can be used for orchard; if hilly, no matter. In fact, the rough, hilly portions of the farm are usually well adapted to fruit and may be made one of the most profitable parts. Preparation of the soil consists mainly in deep, thorough plowing, harrowing and leveling. Plant 20 to 30 feet apart, preferably 30. The first few years a crop of small fruits, strawberries or vegetables may be grown **between, not in, the rows.** We pay personal attention to selection of scions and roots and believe it pays our customers. It is impossible to propagate fine fruit from poor fruits or diseased trees,

### SUMMER

**YELLOW TRANSPARENT.**—A fine bright yellow apple; fruit juicy and rich; subacid. Tree hardy, upright grower; bears young and abundantly. We have seen one tree mature fifty-five perfect apples the second year after setting. Earliest of all; ten days before Early Harvest.

**LIVELAND RASPBERRY.**—Medium, roundish-conic, beautifully colored, waxen white striped, shaded and marbled light crimson; flesh white tinted pink, tender, juicy, subacid, almost sweet; about with or a little later than Yellow Transparent. A Russian variety; very hardy and a young bearer. Ideal for home use or market. Absolutely the most valuable early apple; succeeds everywhere. Its unusual beauty and fine quality, combined with earliness and fine size, make it the most popular early summer variety. We know of no red early apple anywhere nearly so good as Liveland Raspberry.

**RED JUNE.**—The hardy, upright grower. Medium, size; red; flesh white and tender. Bears well. A good eating apple. July 1st.

**EARLY HARVEST.**—Medium size, flat; yellow. Tree of rather spreading habit. An old variety; bears abundantly; fine for table use. First of July following Red June.

**SWEET JUNE.**—Tree a beautiful upright and spreading grower; bears abundantly. Especially adapted to the West. Fruit good size, round; greenish yellow, covered with green dots; flesh yellow, sweet and rich. Begins ripening July 1st to 10th; lasts long.

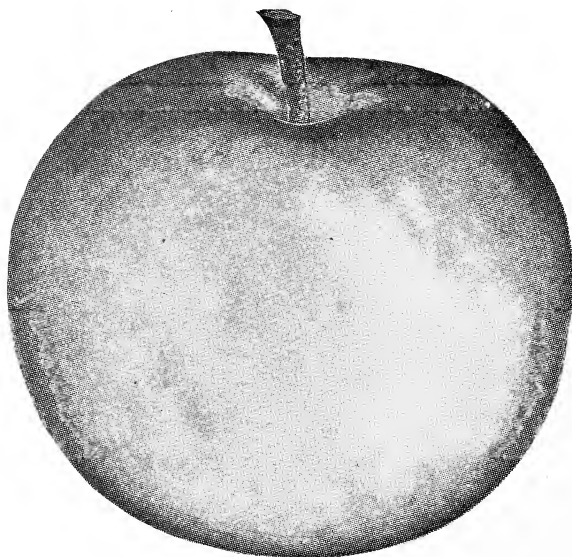
**DUCHESS OF OLDENBURG.**—A Russian variety that has proved hardy. Medium, roundish, streaked with red; flesh white, sub-acid; quality fair. Rather a crooked growing tree in nursery row. Latter part of July.

**MAIDEN BLUSH.**—Large flat, pale yellow, with slight crimson blush when exposed to sun; flesh white, tender, strong sub-acid; stands at head of apples for frying; good market variety. August and September.

**PENNSYLVANIA RED STREAK.**—Tree vigorous; bears well. Fruit flat, streaked with dull red. Resembles Rambo, but better suited for this climate. Fine for eating and good cooker. A valuable market variety. Ripens in September.

**RAMBO.**—Old, well-known variety, highly esteemed for its fine flavor. Not a success in this latitude. We do not recommend it.

**WEALTHY.**—A variety rightly named. Recommends itself where known.



GRIMES GOLDEN



Tree vigorous and hardy, an upright grower; bears young and very heavily. Fruit roundish, oblate; light ground mostly covered with dark red, set with white dots, smooth and glossy. Flesh white, subacid. September.

**GRIMES' GOLDEN**—Best quality of all apples. Round, oblate; rich golden yellow color, skin rough, flesh deep yellow, fine grained, delicious flavor, spicy subacid. Tree a compact grower, very hardy, especially adapted to the West; bears regularly and abundantly. Should be picked in September. Sept. to Oct.

**WAGNER**—Medium to large; beautiful bright red with contrasting pale yellow; fine texture, high flavor; very desirable for kitchen and desert use. Bears young. Nov.

**JONATHAN**—Tree poor grower in nursery row, but hardy and stands drouth well in orchard; long lived. Fruit fair size, round, tapering to the eye; light yellow ground covered with bright red stripes, often almost solid dark red. Skin thin and smooth; flesh white, tender and juicy. A mild subacid, but like Grimes' Golden, picked early. September to November.

**ROME BEAUTY**—Large, round, almost flat; yellow ground with bright red stripes. Flesh yellow, rich, subacid, fine quality. Tree large, spreading; moderately productive in the West. October to December.

**BAILEY SWEET**—A very vigorous, thrifty tree; bears heavy. Fruit round, slightly oblong, tapering to the eye; a bright red with darker red stripes; flesh white, a sugar sweet. October to December.

**COOPER'S EARLY WHITE**—Tree vigorous, but dwarfy habits; strong stiff limbs. Fruit good size; light yellow; flesh white, subacid; fine for home use and market. A splendid western apple; bears young. Latter part of July or Aug. 1st.

## WINTER

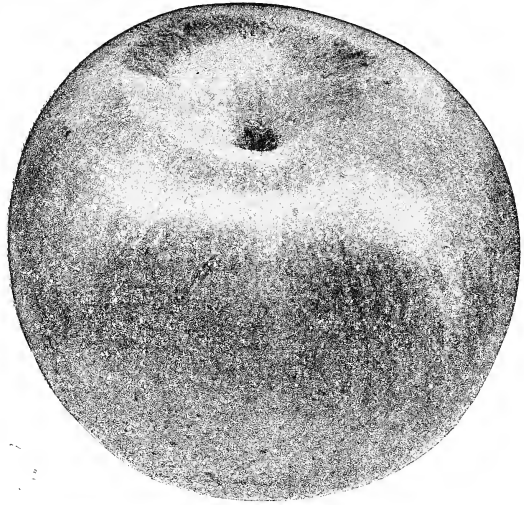
**BEN DAVIS**—This old variety is still one of our leaders in commercial orchards. Fruit large, round, conical; light ground almost covered with bright red stripes. Flesh, white, tender, subacid; quality fair. Tree perfectly hardy, long lived and a heavy bearer; fruit even size, good shipper and fine color. November to April.

**MISSOURI PIPPIN**—Tree bears young regularly and too heavy, bears at least two years earlier than any other variety. Tree usually short lived on account of over-bearing. Fruit good size, and large if thinned; flesh white, juicy; quality only fair; light ground covered with bright red stripes, often quite dark. December to April.

**WINESAP**—A very popular variety on account of the fine flavor, bright red in color, and hardy tree. Size medium; good family apple. November to March.

**MAMMOTH BLACK TWIG**—Tree hardiest of all varieties; large spreading top, abundance of foliage; bears regularly and abundantly; long lived. Fruit large, round, oblong, yellow ground covered with dark bright red sometimes almost black; very showy, flesh yellow, juicy, quality resembles Winesap. November to April.

**WINTER BANANA**—Large, clear pale, waxy yellow with beautiful contrasting pinkish red blush, attractive, juicy, mild subacid, characteristically aromatic; good desert quality; flesh moderately firm, somewhat crisp, tender, juicy, vigorous; a young and regular bearer of good crops.



WINESAP



UNITED LITHO. & PLS. CO., BROOKLYN, N. Y.

1915



## DELICIOUS

**T**HIS much advertised apple is one of the most valuable varieties we know of. The tree is exceptionally hardy and long lived and succeeds wherever tried. The fruit is beautiful dark red, juicy, and of the very finest flavor; splendid keeper, and brings the highest market prices. Unsurpassed for either eating or cooking. You can't plant too many "Delicious."



**YORK IMPERIAL**—Fruit medium oblate; flesh firm, juicy, good; light color, shaded with crimson. Tree hardy. November to February.

**GANO (Synonym Black Ben Davis)**—Often spoken of as improved Ben Davis, to which it is very similar. Comprised all good points of Ben Davis and is a bright red in color. President Wellhouse of Kansas State Horticultural Society, planted eighty acres of this one variety after investigating it. Should be planted heavy as commercial variety. December to April.

**STAYMAN'S WINESAP**—Dull mixed red, distinctly striped. Larger than ordinary Winesap and better flavor. Heavy bearer. Resists drouth well. Very highly recommended and becoming a great favorite both as a market variety and for home use. A good variety for commercial orchards.

**ARKANSAS BLACKS**—In color, very dark red, almost black; good size, quality good, keeps long. Tree hardy, bears light in this locality and north. Recommended for Southern Oklahoma and New Mexico planting. December to May.

**ROMANITE (Gilpin Carthouse)**—Fruit medium size; light ground streaked with red; mild subacid, rather sweet; quality second class. Valuable as productive and a late keeper. January to June.

**WHITE WINTER PEARMAN**—Medium to large, yellowish, brownish-red cheek; fine grained, crispy, subacid; aromatic; late. Splendid flavor and noted as a fine table variety. Fancy commercial variety.

**RAWL JANET**—Tree good grower, not overly large. Fruit medium; somewhat conical, regular; surface smooth, mixed and striped on yellow and green; flesh fine grained, juicy; subacid. Not the best commercial variety. November to spring.

**McINTOSH RED**—Good size, very attractive appearance, bright deep red; flesh very tender; perfumed, delicious. Resembles Fameuse but larger. Especially popular as a Western commercial variety.

**SPITZENBURG**—Large, oblong and smooth, nearly covered with rich, lively red and dotted with yellowish russet dots; on shaded side yellowish with broken stripes of red; flesh firm, crisp and juicy, with a delicious crisp flavor. An old, hardy variety and a good one.

**DELICIOUS**—Fruit is large, with the surface almost covered with brilliant dark red, blending to golden yellow at the blossom end. In quality it is unsurpassed; flavor sweet, slightly acid, making it very pleasing, with an aroma delightfully fragrant. The flesh is fine grained, crisp and juicy. A splendid cooker and unsurpassed for eating. One of the very best keepers and brings fancy prices at the city fruit stands. While somewhat new here, it has been thoroughly tried out. The original tree in Iowa is over twenty years old but still bearing prolific crops. November to spring. See colored plate.

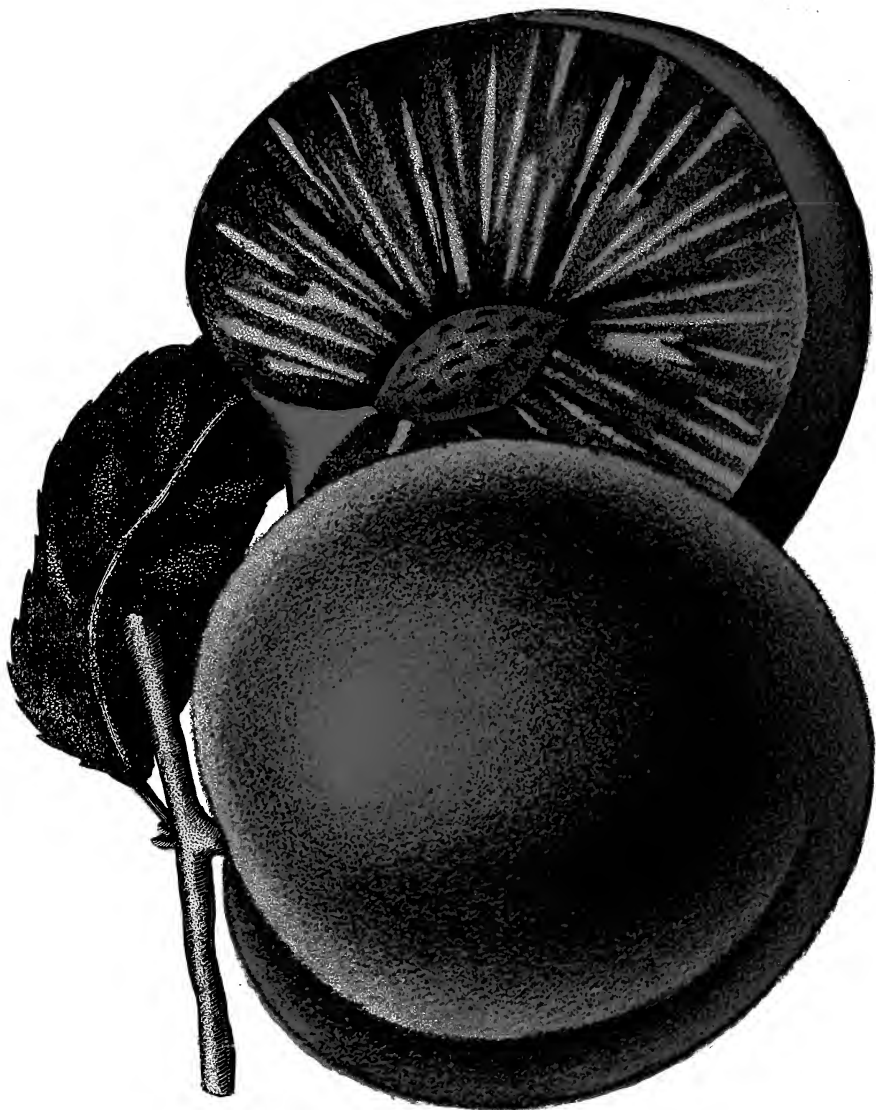
## CRABS

**FLORENCE**—A crab larger than the Transcendent; quality excellent; season early. Tree thrifty, thoroughly tried in this section; better than all the other crabs.

**WHITNEY**—Tree vigorous, thrifty and very prolific; fruit largest of the crab family; light green, striped and almost covered with a bright red; flesh mild, juicy. July.

**TRANSCENDENT**—Tree a vigorous grower and prolific, but is bothered some with blight. Fruit well known, fair size; straw color with red stripes when exposed to the sun. Flesh crisp, juicy, very fine for all purposes. August.

**HYSLOP**—Tree vigorous grower. Fruit large, a dark red color, almost black. Flesh mealy, good for jelly and preserving. September.



UNITED LITHO. & Ptg. COS., ROCHESTER, N. Y.

### JAPAN BLOOD DWARF

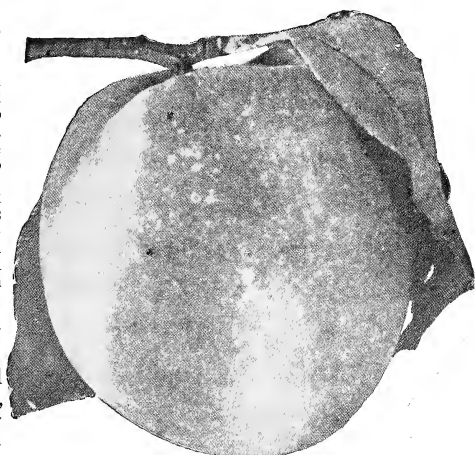
**A** NEW early peach of Japanese origin. Most early peaches are watery and of poor quality, but Japan Blood Dwarf is large, very showy, red, thick meat, pit no larger than a plum pit; rich, juicy, bright red juice; flesh red, with streaks of white to the pit. The only early peach of fine quality. Good for market, eating or table use.

## PEACHES

This daintiest of fruits, given proper care, is one of the most profitable. No fruit commands better prices in its season. In the home orchard it is indispensable. A sandy loam of gravelly soil is best but the peach will adapt itself to any soil not wet. A northern slope is preferable to southern, as it retards early blooming. Plant 16 to 18 feet apart, requiring 134 to 170 trees per acre. Cut back to 20 to 26 inches if a low headed tree is desired. After growth is started, remove all but three or four branches, distributed as equally as possible to secure a well balanced tree. Perhaps the best cultivation is frequently shallow stirring of the soil until July or August, followed by a green cover crop turned under in the spring.

(NOTICE—All varieties are freestone unless otherwise noted).

**AMSDEN**—Medium size, color red shaded with dark red; flesh white, juicy and sweet when fully ripe. Very productive and regular bearer; semi-cling. June 15th to 20th.



CHAMPION

**SNEED**—A seedling of Chinese Cling; white, with delicate red cheek. Has proved a success here. Not subject to rot. Ripens with earliest. Tree sprawling. June 15th to 20th.

**ARKANSAS TRAVELER**—Fair size, white, about half covered with red; juicy, sweet, semi-cling. June 20th to 25th.

**ALEXANDER**—Cling, medium to large, pale green, mostly covered with deep red. Flesh white, tender and juicy. A very good early peach. Middle of July.

**MAYFLOWER**—Very early, ripening about June 10th. Large, very attractive as it is bright red. Flesh yellow. Freestone. Very highly recommended for early market or home use. Stands shipment well. Featured by many at an extra price, though furnished by us at our regular rates.

**JAPAN BLOOD DWARF**—This peach cannot be recommended too highly. It is of Japanese origin; the tree does not grow large but it is an exceedingly heavy bearer and it is necessary to thin the fruit at least half. The fruit is dark red, and the flesh red, with occasional light streaks clear to the pit. Juice is blood red. Freestone. Exceedingly small pit. Flavor unsurpassed; rich, juicy, firm, and in fact the one good early peach in preference to anything we have ever seen. It is splendid for table use, canning and market. Brings double the price of the ordinary early peach. Its fine flavor, firm flesh and beautiful color makes it a favorite wherever known. Tree bears very early; frequently a few peaches the first year, good crop the second year. Fruit ripens the last of June or first of July. It is a money maker unexcelled for any kind of use; very hardy, heavy bearer, and in fact the very best early peach we ever saw. No orchard complete without a few Japan Blood Dwarf, and though they cost a little more, they are well worth it. See colored plate.

**TRIUMPH**—Large; yellow with bright red cheek; flesh sweet and firm. Good shippers; productive; the very best early yellow freestone yet introduced. Last of June.

**GREENSBORO**—Large, colored beautifully with crimson with yellow cast; flesh white, very juicy, excellent, semi-cling; mid-June; a profuse bearer.

**CHAMPION**—Large, creamy white, light red cheek, fine quality, rich, juicy and sweet, no finer white market peach than Champion; noted for regular bearing. August 1st to 12th.

**CARMAN**—Originated in Texas. Very showy, white peach with red blush resembling Elberta in shape. A new peach highly recommended for early season. July.

**BELLE OF GEORGIA**—Very large, white with red cheek; flesh white, firm, excellent flavor; very prolific; excellent shipper; freestone; ripens with Crawford's Early or before.



**MAMIE ROSS (Cling)**—White with red cheek; round, very large, sweet and rich; very prolific; never fails to product annual crop. Ripens last of July.

**MOUNTAIN ROSE**—Large, white, red cheek; flesh white, slightly red at the stone, juicy, rich and sweet; fruits regular. July 25th to August 5th.

**FOSTER**—Large, yellow with dark red cheek resembling Crawford's Early; hardy and prolific, while Crawford's Early is a failure. July 25th to August 10th.

**ELBERTA**—Largest size, oblong, yellow with red cheek; flesh deep yellow, firm, juicy and rich. Best market variety known; specimens measured twelve inches around. Never knew a planter to be disappointed in Elberta. We prize it very highly because of its regular heavy crops. Bore when seedlings failed. Queen of all peaches in the Southwest. August 15th to September 1st.

**EMMA**—A new yellow peach, thought by some to surpass Elberta, large, firm, prolific. Ripens after Elberta. Recommended for commercial planting.

**CRAWFORD'S LATE**—Good size; golden yellow with deep red cheek; flesh deep yellow, rich and sweet. None better quality. August 28th to September 5th.

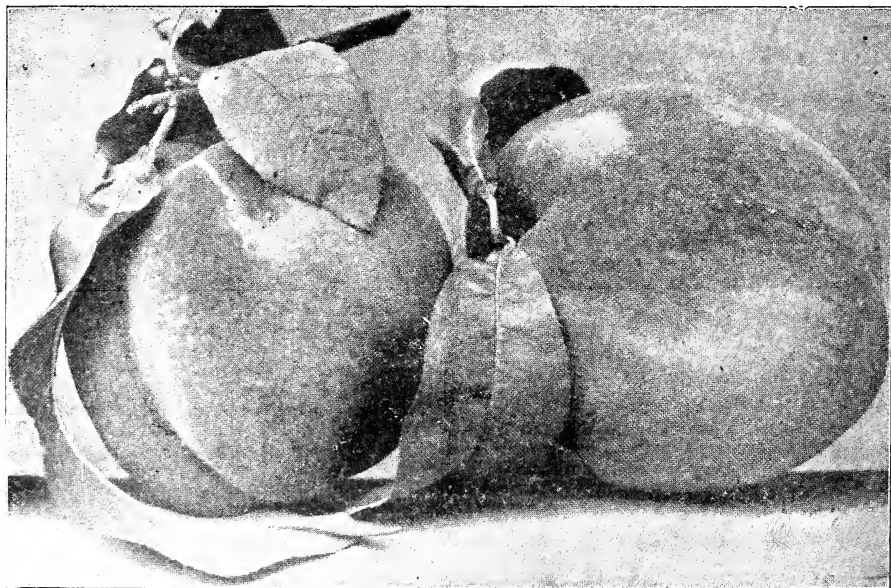
**CROSBY**—A fine medium size yellow peach with quality equal to Elberta; bears young and loaded with fine fruit. A great money maker, as it ripens after Elberta and sells as well. September 1st to 12th.

**MUNSON'S CLING**—Frequently called "Elberta Cling," as it ripens about with that variety and is as large or larger. Orange yellow, half covered with bright crimson mottling; flesh firm as Elberta, quality as good or better.

**ORANGE CLING**—Very large yellow cling, sweet; delicious flavor. Bears regularly and abundantly. Ripens just after Elberta. Rapidly becoming recognized as a good commercial sort.

**PHILLIPS CLING**—Large, flat, pure yellow peach, very solid and firm, excellent for canning and preserving. On account of its firmness stands shipment especially well. Season late, last of September, which makes it a good seller, other varieties being gone.

**CHINESE CLING**—Large, globe-shaped, creamy white, with red cheek; flesh white, red at the stone. A cling noted for quality; none better. September 1st to 10th.



ELBERTA

**STUMP THE WORLD**—Large, almost round, white with slight red cheek, very sweet and rich. One of the best white freestones. Ripens in this locality September 1st to 15th.

**MATHEWS BEAUTY**—A large yellow peach with red blush, ripening about two weeks after Elberta. Very prolific and highly prized as a commercial variety. Brings premium price on account of quality.

**WONDERFUL**—Large yellow freestone, fruit red at the stone. Very desirable for late season. September 10th to 20th.

**SALWAY**—Large, oblong, resembles both Picquetts Late and Smock, but better than either; yellow with red cheek; fruit red at stone; very productive. September 20th to October 5th.

**HEALTH CLING**—The old white cling, ripening late in the fall, very large and fine. September 20th to October 5th.

**BLOOD OR INDIAN CLING**—Large, dark red; flesh red to the stone with abundance of red juice; very hardy and productive. Last September to October 10th.

**HENRIETTA CLING**—Very large, yellow cling, with dull red cheek; flesh deep yellow, red at pit. Best yellow cling, prolific and regular; ripens in October.

## PEARS

The home orchard is incomplete without Pears and they are a staple and profitable commercial crop in nearly all parts of the country. While Pears will thrive on a variety of soils, they succeed best in a rather hard, clay soil, which rather retards a too rank growth. Tilling and fertilizing are an advantage, but should not be carried so far as to produce too vigorous a growth, and fertilizers should not be too rich in nitrogen, as rank growth favors attacks of blight. If at any time this appears, cut back into sound wood and burn the clippings. The pear bears on spurs and these should not be removed in pruning unless the tree is bearing too heavily. The quality is much improved by proper ripening indoors, the early varieties being gathered about ten days before maturity, autumn varieties two weeks, and winter varieties left on the trees as long as possible before the leaves begin to fall. Place them in a cool place, sorting occasionally.

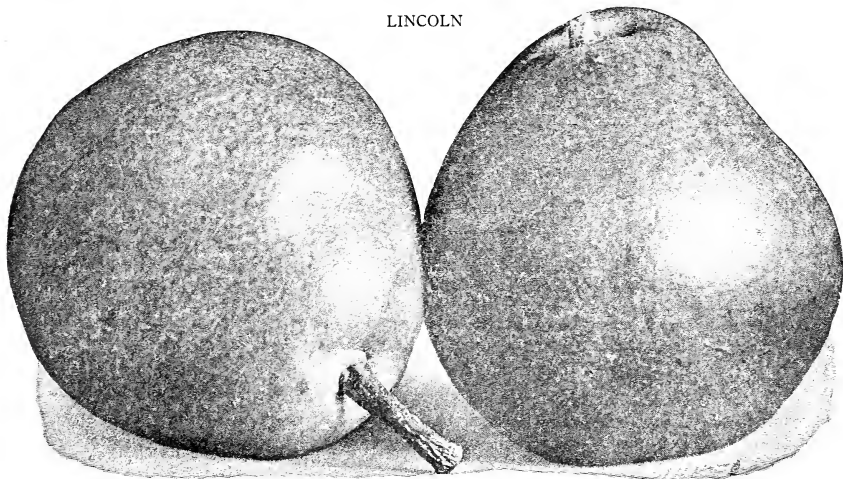
**CLAPP'S FAVORITE**—A fine, juicy, rich, summer pear; pale yellow, with tinge of red. Fruit large; tree prolific. Ripens last of July.

**BARTLETT**—A well known old variety, highly esteemed for its fine quality. Trees blight worst of all varieties. August 1st to 15th.

**SECKEL**—Often called the little sugar pear, small, yellow, overspread with a brownish shade; flesh juicy, sweet and spicy. Tree thrifty, large, spreading growth, bears regularly and very heavy crops; seldom ever blights. August 15th to September 25th.

**LINCOLN**—Bright yellow in color; fine quality somewhat resembling Bartlett. Good flavor; ripens well on tree. Large size. Resists blight well and bears heavily. A splendid variety for this climate, either for home or market use. We can recommend this variety highly. September to December.

LINCOLN



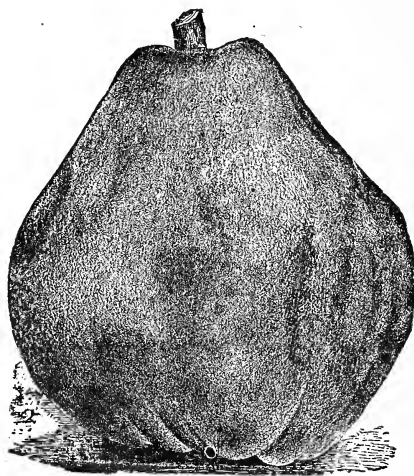


**GARBER**—Medium size yellow, well colored with red. Fair market variety. Tree thrifty and bears young. Almost blight proof. Last of September to first of October.

**BUERRE d'ANJOU**—Very large greenish yellow, slightly tinged with yellow, with slightly red cheek when exposed to sun. Irregular shape. Very high quality; flesh yellowish white, fine grained, sweet and rich. Commands high price. Does not resist blight as well as Kieffer. September to December.

**DUCHESS (d'Angouleme)**—A very large, showy pear, often weighing one pound each; oblong, largest at base, greenish yellow, rough, uneven surface. The most profitable dwarf bear in this section. Trees rarely ever blight; are always loaded down with fruit. Little trees in nursery row often hang full of fruit. September to October.

**KEIFER**—Tree vigorous, beautiful, upright grower, bears young and heavily, almost exempt from blight. Fruit large, oblong, large in center; green when picked, turning to yellow when ripe. Quality fair. Fruit must be gathered and laid away to ripen before good. The best commercial variety. October to November.



ORANGE QUINCE

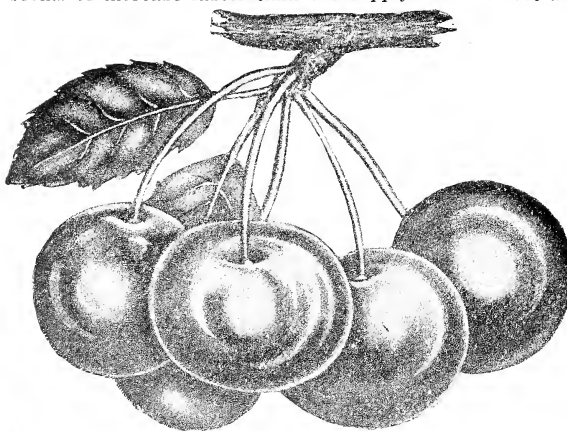
## QUINCE

**ORANGE**—Very large; golden yellow; fine for jelly and preserving. Sells readily for \$3 per bushel.

**MISSOURI MAMMOTH**—A new variety, highly recommended, but not fruiting here.

## CHERRIES

One of the most popular fruits, its hardiness, good habit and the fact that it bears annually are strong recommendations. Cherries are very profitably grown for market, coming in just at the close of the strawberry season, well grown trees producing from 3 to 5 crates of 24 quarts, which readily sell at \$2.00 to \$3.00 per crate. And the demand seems to increase faster than the supply. Set 18 feet apart requires 134, or 20 feet apart



EARLY RICHMOND

requires 108 trees per acre. They will grow on thinner soil than most other fruit trees, though to obtain the finest fruits, a deep, mellow soil of good quality desirable. A dry soil is everywhere conceded. On wet soil the tree is apt to be short lived. Planted in the dooryard it becomes an ornament both when in bloom and when loaded with its beautifully colored fruit. Cherries are always needed for home use and any surplus finds a ready sale.

Our cherry trees are budded on Mahaleb stock, which do not throw sprouts from the roots.

**DYEHOUSE**—One week earlier than Early Richmond, which the fruit resembles, except that it is a little darker color; quality good. Last of May.

**EARLY RICHMOND** (Early May)—Our best early cherry. Fruit fair size; bright red. Tree vigorous, round top; bears young and regularly and is prolific. First of June.

**KANSAS DUKE**—While practically a new cherry for this climate, it is exceeding expectations wherever tried. Fruit is very large; deep red color; flesh reddish,



UNITED LITHO. & Ptg. CO., ROCHESTER, N. Y.

### KANSAS DUKE

VERY large, round cherry, deep red color; flesh redish, juicy and rich. The tree is a beautiful, upright grower and very ornamental for lawn planting, its dark green foliage making it particularly attractive. Bears abundant crops and the nearest sweet cherry suitable for our climate. Ripens between Early Richmond and Montmorency. An especially desirable variety.

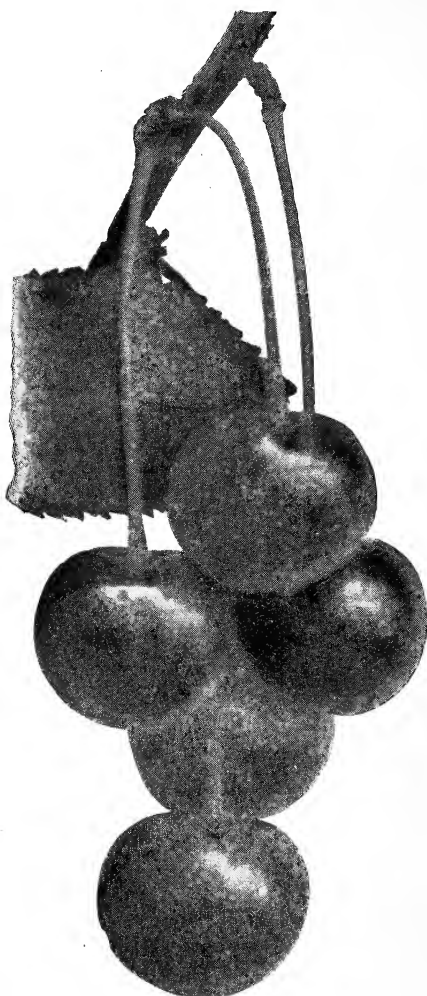
juicy and rich. The tree is especially attractive as it is an upright, compact grower, which, together with the heavy dark green, foliage, makes it a beautiful tree for lawn planting. It is a prolific bearer and the abundant crops make it especially desirable for commercial use. It is the nearest sweet cherry that is a success in this climate. Ripens about a week before Montmorency. A very valuable variety. See colored plate in other part of catalog.

**MONTMORENCY**—Tree upright and spreading; vigorous, stands drouth well, bears regularly and very prolific. Fruit round and flat; a rich, bright red; quality good, flavor resembling Early Richmond, but fruit more solid. Ripens two weeks after Early Richmond, June 14th to 20th.

**OSTHEIMER (Weinchel)**—Fruit large, heart-shaped, almost black when ripe; juicy and very rich. One hundred and twenty-six quarts have been picked from a tree in one year. Ripens between Montmorency and English Morello. Tree small for its age. June 20th to 25th.

**ENGLISH MORELLO**—Large, dark red almost black when ripe, purplish red colored juice; very rich, sour. Tree bears young, regularly and is very prolific. A fine market variety, especially noted for its hardiness in the West. Trees slow growth, small for their age. First of July.

**COMPASS CHERRY-PLUM**—Absolutely hardy everywhere. Originated at Springfield, Minnesota. A cross between the Sand Cherry and the Miner Plum. Fruit nearly an inch in diameter; bright red, sweet and juicy, and of very fine flavor. When young and green the fruit have more the appearance of plums, but as they mature become round like a cherry. The pit is somewhat elongated. For canning and table use the fruit is unsurpassed. The tree bears young and is a regular and heavy bearer. Should produce some fruit the next year after setting out. Does well from Texas to North Dakota, and especially valuable for all parts of Kansas, Oklahoma, Missouri, Nebraska and Colorado.



MONTMORENCY

## PLUMS

Plums will succeed in almost any kind of soil, in this it ranks probably next to apple. It is usually considered that the European class prefer rather heavy clay loam, or at least are not their best on light sandy soils, while the Japanese type prefer rather light soil with a moderate amount of sand. The Wild Goose group is most successful on rich sandy lowland, but have a wide range of adaptability to various soils. In general plant 18 to 20 feet apart. Mixed home orchards may be closer. If a power spray is used, not less than 20 feet one way. For best results several varieties should be planted, as some are not good self-pollinizers.

**MILTON**—Fair size, roundish, oblong, beautiful bright crimson red with white dots. A cross of Wild Goose; quality far better. Tree vigorous. A new variety, but is inclined to be very hardy and prolific. June 20th.

**WILD GOOSE**—A well known old variety; fair size, nice looking; quality poor, rots in twenty-four hours after picking, making it a complete failure for market. Bears abundantly but not regularly. July 1st.



**GREEN GAGE**—Small, round, slightly oblong; yellowish green, juicy and sweet, almost a freestone. An old and popular variety on account of its good quality. Good bearer. Season early August.

**RED JUNE**—Earliest Japan plum; bright deep red with bluish bloom; good size, pointed; flesh yellow, sweet and rich; very solid for early fruit. Tree vigorous and very prolific. June 25th.

**ABUNDANCE**—Bearing here the past seven years. Small tree, but trees hang loaded down with fruit; must be thinned to allow room for development. Fruit large, dull red color, greenish yellow flesh, melting sweet. A great market plum. Tree an upright grower, vigorous and hardy, bears young and regularly. July 5th.

**BURBANK**—Tree vigorous and hardy, sprawling grower, almost drooping, seems shaped by nature to hold its load of fruit; bears young and regularly; could not be more prolific.

**SATSUMA**—Large; flesh blood red. Bears young and very prolific in Oklahoma, Colorado and New Mexico. One of the Japan family.

**WICKSON**—Tree thrifty, upright growth. Fruit large, deep red color, flesh firm. Highly recommended for the late season. August 1st.

**JAPAN GOLD**—A decidedly valuable variety. Golden yellow color; slightly overspread with beautiful blush. Delicious flavor and a great favorite where known. Tried in many different localities and never fails to make good. Does well on thin, dry soil. Rather dwarfish tree with slender limbs.

**DESOTA**—Medium size; almost round, dark red, with small round white dots; flesh orange yellow, juicy, quality good; very sour when cooked. The best native variety we know of. August 5th.

**LITTLE BLUE DAMSON**—Small, dark blue plum fine quality. Tree slow coming into bearing, very subject to disease and fruit to curculio. September.

**LOMBARD**—A familiar variety. Tree hardy, prolific and will do well in light soil. Fruit medium size, greenish or yellow when thoroughly ripe. One of the best European sorts. Freestone. Fine flavor. A variety that should be sprayed.

**GERMAN PRUNE**—Nearly purple in color, oblong oval in shape, with crease in one side. Flesh firm, light green. Semi-freestone. Very prolific but slower coming into bearing than some other varieties.

## APRICOTS

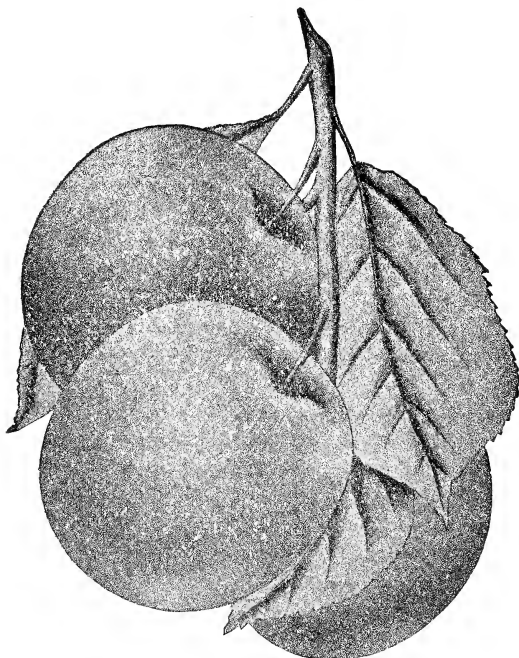
The apricot is the hardest tree we have in the nursery. Will grow vigorously in new prairie land or on rocky points where all other trees fail. Some American varieties uncertain about bearing, other harder are proving good.

**EARLY GOLDEN**—Small, golden yellow, oval shaped, freestone; very prolific when it bears, but often fails on account of spring frosts. Middle of June.

**ROYAL**—Medium size, roundish oval, dull yellow, sweet and highly flavored; freestone. Last of June.

**MOORPARK**—Large, almost round, golden yellow, with red cheek; freestone, juicy and rich. We recommend this as one of our best. First of July.

**SUPERB**—A fine seedling originated at Lawrence, Kan. Fruit large; rich yellow flesh; quality very fine. After Moorpark.



BURBANK



UNITED LITHO. & PTE. CO., ROCHESTER, N. Y.

## EDRINGTON

**T**HIS new apricot surpasses anything we ever saw. Originated at Belle Plaine, Kansas, and we have secured the sole right to propagate and introduce it. The tree is an especially compact grower, which makes it very desirable. The fruit is very large, bright golden yellow, red cheek, delicious flavor; perfect free stone. The very best commercial variety. Very productive. Ripens in July.



**ALEXIS**—Good size, round; pale yellow with red blush. Bears heavy crop when early ones fail. Doing well in this section. Russian. July 4th.

**EDRINGTON—APRICOT**—This is a new variety originated at Belle Plaine, Kans., and propagated exclusively by us. Surpasses anything in apricots we have ever seen and this year brought double the price of ordinary varieties on the Wichita market. Tree is a beautiful upright grower, making it especially suitable for lawn planting. Fruit is bright yellow; red cheek; perfect freestone; delicious flavor; double the size of the ordinary varieties. We cannot recommend this apricot too highly and no orchard complete without a few of these trees. Ripens in July. Colored plate in other part of catalog.

## GRAPES

**CAMPBELL'S EARLY**—Bunch and berry better than average; black, fine quality, keeps long after ripening. Ripens with Moore's Early. New, but very popular.

**MOORE'S EARLY**—Bunch medium, compact, very large, black, quality good. Bears regularly, but not so heavily as Worden. Good market grape on account of its carliness. Last of July.

**WORDEN**—The best black grape we have found. Bunch large, compact; berry large, black, thin skin, fine flavor, rich and very sweet. Vine perfectly hardy, bears heavily and is very prolific. Fruit sells readily at double Concord price.

**DRACUT AMBER**—A small bunch, amber color, good for jelly, poor for market. August 15th.

**CONCORD**—The old, well known black grape; good flavor, quality fair. Vine hardy, bears regularly and heavy crops. August 22nd.

**NIAGARA**—Large, long bunches, very fine white grape, quality first-class, hardy, bears regularly and heavy crops. Comes in just after Concord. Have discarded Pockington and Elvira, as Niagara is far better than either.

**AGWAM (Rogers No. 15)**—A very large grape of fine flavor, sweet and rich. Vine hardy and vigorous grower; prolific. Color dark red. August 25th.

## BLACKBERRIES

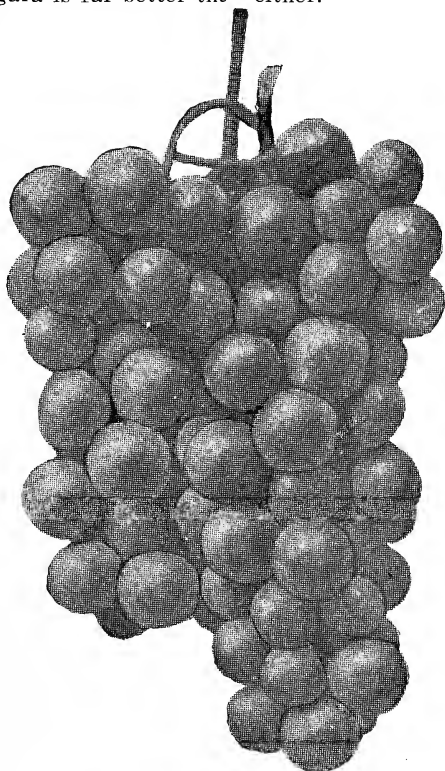
Blackberries thrive in almost all soils, but produce best in a strong, deep loam that will retain moisture. Plant 2 to 4 feet apart in rows 8 feet apart. Clip off the points of growing canes at 2 to 3 feet; this will cause the plants to sustain the fruit more readily, increase the yield, and render picking easier.

No fruit has been more neglected in the past by nurserymen than Blackberries. While some of our most eminent nurserymen have advanced the standard of other fruit, Blackberries are often sold that are run down and not fit for planting.

Blackberries cannot be grafted or budded, but they must be propagated by cuttings from berries with perfect points, and then produce a high standard as surely as thoroughbred stock.

**Fine Berries Sell**—We have often seen a crate of large, even sized berries sell quickly at an advanced price, when poor, irregular berries, with hard cores and almost tasteless, were disregarded.

**EARLY HARVEST**—Bush perfectly hardy, cane stiff, upright; fruit good size, long, very small seeds, never failed with us in dry seasons. In productiveness a



WORDEN

surprise to everyone, bushes being weighed to the ground with fruit. If you wish to keep a high standard of berries, don't allow them to waste energy on useless sprouts. First of July to June.

**KENOYER**—The very largest early berry. Ripens with Early Harvest. Fruit is nearly as large as the late varieties. Good flavor; small seeds and no core. Canes are strong and stocky and vigorous growers. We have tried out this variety thoroughly and can recommend it highly for either home use or commercial planting. Not subject to rust.

**MERCEREAU**—This is without doubt the blackberry of all the new blackberries. It is very large, and long, jet black, luscious, and has all the qualities of an ideal berry. We have never seen any berry that promises so well. We have no hesitancy in recommending this one to all who intend planting blackberries. One week after Early Harvest.

**WARD**—This is doubtless a seedling of Kittatinny, which it closely resembles. It is vigorous, hardy and free from rust. It was found growing wild in Monmouth County, N. J.. Its fine fruit, strong canes, clean, healthy, loaded with enormous crops of large berries, soon attracted attention. It has now been fruited here for several years, bearing large crops annually of handsome berries. Very highly recommended. One week after Early Harvest.

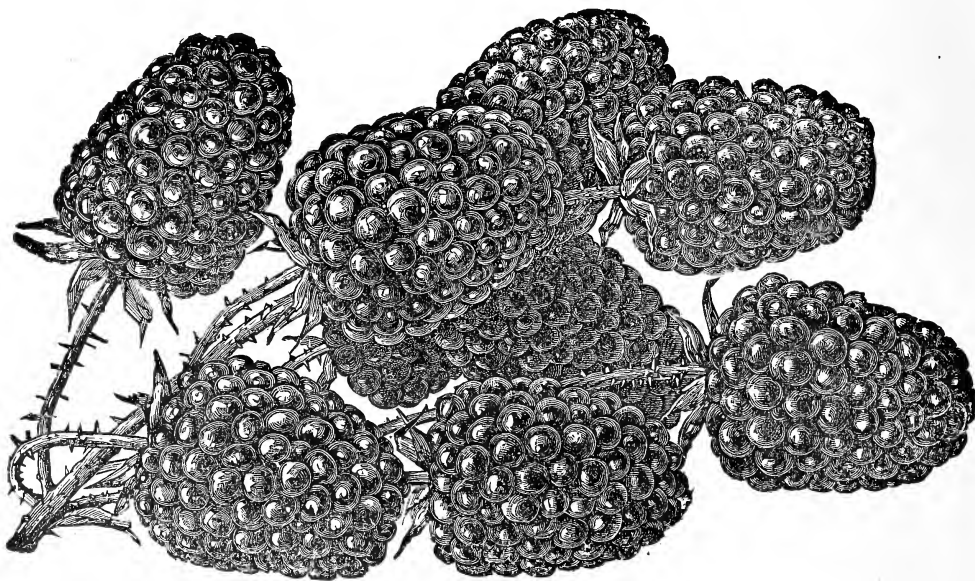
**SNYDER**—Canes very hardy, fruit medium, round, large seeds; esteemed because of hardness; very prolific in some parts of the West, but not satisfactory in others. Two weeks after Early Harvest.

**KITTATINNY**—Large, rank growing canes, long thorns; fruit of the largest size, fine flavor; is bothered some with rust, yet it is our best late Blackberry; very productive. One month after Early Harvest.

**BLOWER**—Comparatively a new variety here. Highly recommended. Large size, good flavor, jet black; good shippers, hardy; prolific bearers. Does not winter kill, and from all indications is a valuable kind.

**LUCRETIA**—Very large open grained Dewberry; sweet and rich; becoming more popular every year; vine trails on ground or can be very successfully handled on low trellis.

**AUSTIN**—Originated in Texas, not equal to Lucretia for northern states, but highly recommended for Southern Oklahoma.



KENOYER



UNITED LITHO. & PTD. COE, ROCHESTER, N. Y.

## TUCKER

OF ALL the Blackcap Raspberries, the Tucker takes the lead. Originated in Winfield and thoroughly tried out. Very abundant producer. Bears when other varieties fail. Exceedingly large berries; flavor unsurpassed. Seeds are very small. Good for all purposes and especially suitable for market. Ripens about a week before the Kansas.



## RASPBERRIES

Plant 3 to 4 feet apart in rows 6 feet apart, requiring 2420 or 1815 plants per acre, respectively. Deep soil that will retain moisture in a dry season is preferable, the lighter loam for the red varieties, the heavier for the black. Allow 4 to 6 canes to grow from each plant for fruiting; pinch off the canes when  $2\frac{1}{2}$  to 3 feet high. Cut out all old canes when bearing season is over, as a cane bears but once. A mulch should be applied the first fall.

**TUCKER**—The very best Blackcap we know of. Originated here in Winfield and for the past ten years thoroughly tried out. The plants are especially strong growers and the berries are very large, with small seeds. The flavor is excellent and it is a good berry for all purposes. Ripens about a week or ten days before the Kansas. Stands drouth well and often produces a full crop when other varieties fail entirely. Bears abundant crops. On account of its high quality, we have known this variety to bring a dollar per crate more than other varieties. Cannot be recommended too highly. See colored plate.

**KANSAS**—The best Blackcap. Originated at Lawrence, Kans.; canes hardy; bore heavily with us after twenty-two degrees below zero. A perfect success in the West. Season early.

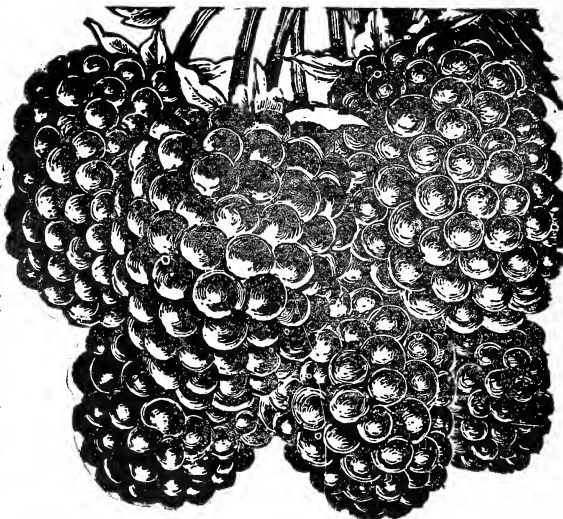
**CUMBERLAND**—The best Blackcap introduced. In size resembles Blackberries; quality equal to Kansas. Perfectly hardy for the West. Don't miss planting Cumberland.

**PLUM FARMER**—A splendid black raspberry that has already proven itself one of the leading and most profitable varieties. The plants are very vigorous and have a silvery bluish appearance when ripened. The fruit is grayish black, very firm, a good shipper, attractive and splendid flavor. Fine for evaporating as well as for fresh market or home use.

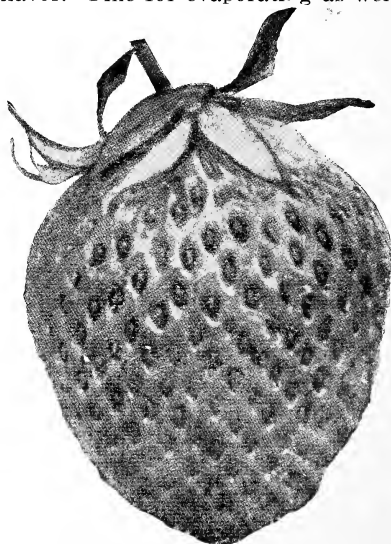
**CARDINAL**—The first Red Raspberry we have ever recommended for this locality. Canes hardy, bearing great crops of rich, red berries; a natural Western plant; originated at Lawrence, Kans.

**CUTHBERT**—A strong growing, hardy, red variety. Stands hard winters well. Berries very large and firm. Good shipper; flavor is sweet, rich and luscious. Splendid late variety.

**ST. REGIS EVERBEARING**—A new red raspberry that is fast gaining favor. Earliest of all red raspberries, beginning to ripen from June 15th to 20th, and bears throughout the summer. Berries are of a bright crimson, large size and fine flavor. Very frequently bears the first year, which is unusual in the red varieties. Fruit very firm, making it a good shipper, which together with its remarkable productive quality, makes it a very profitable sort. The canes are stocky, strong and good growers and the foliage is thick and does not scald nor sunburn. Stands drouth remarkably well. Has made good wherever tried.

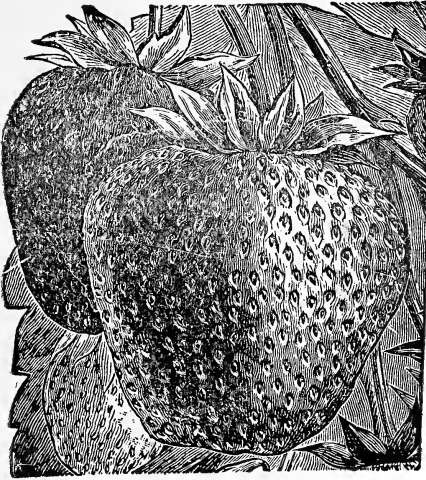


MERCEREAU



WARFIELD STRAWBERRY

## STRAWBERRIES



SENATOR DUNLAP

**BEDERWOOD (S)**—The standard early berry; succeeds over a wide range; very prolific. Ripens one week before Crescent.

**CRESCENT (P)**—An old standard variety; highly prized because of its hardiness and productiveness; stands drouth and neglect best of all; berries bright red; fair size, good flavor. Fertilize with Capt. Jack or Bederwood. Season early.

**WARFIELD (P)**—Dark red; conical shape; noted for rich, fine flavor, brings extra price for table use. Very productive, fine market variety.

**CAPT. JACK (S)**—Berries large; an old standby for home use and market. Plant one or a million; very productive. Mid-season.

**GLENN MARY (S)**—Very large, deep red; irregular, wedge shape; flesh firm, light red, and good quality. Season first after Crescent. One of the most prolific of all the Strawberry family. Plants thrifty and hardy.

**PARKER EARL (S)**—This grand variety is a wonder of productiveness; matured over one quart of fruit to the plant; berries long necked; bright color. Fine for market.

**GANDY (S)**—Very large, pointed; dark crimson. Stands at the head of the berries; firm, rich; can be shipped further than any other variety; hardy, regular, and very productive.

**SENATOR DUNLAP (Per)**—A bright, glossy berry of the Warfield type. The plant is much larger and more healthy and the fruit is also larger and equally as good in quality. It is one of the very best.

**AROMA (S)**—Plants large and very vigorous. Blossom rich in pollen and a good fertilizer. Fruit is large to very large, roundish, conical, smooth and perfect in form, and a beautiful bright, glossy red in color; very firm and of excellent quality. Good commercial variety.

**PROGRESSIVE (Everbearing)**—Fruit and plants quite similar to the Senator Dunlap, but bearing season longer. If weather conditions are favorable will bear all summer, or by keeping blossoms picked off after spring crop till latter part of August, will bring on a good fall crop. A splendid variety.

**AMERICUS (Everbearing)**—Plants are strong; root well. Fruit firm, medium to large in size; light red, heart shaped; quality good. Very productive, bearing from May till frost, if season is at all favorable. One of the leaders among the new everbearers, succeeding over a very wide range of country. A great favorite.

No other fruit gives such quick returns on the investment as strawberries. Commercially, they are one of the most profitable crops. It is just as easy to grow your strawberries for home use as your vegetables, and always have the supply ripe and perfectly fresh. Set the plants just deep enough so that no parts of the roots are exposed, yet not deep enough to cover the crown, seeing that the earth is well firmed about the roots.

**Note**—Our special system of packing insures success).

Some of the most prolific varieties (marked P) have imperfect or pistillate blossoms and will bear no fruit unless every third row is planted with varieties (marked S) of staminate or perfect blossoms.



## GOOSEBERRIES

This is another fruit for which there is always a good demand. They require same cultivation and planting as currants, except that plants may be set in the open field or garden, though a northern slope is preferable. Plant 3x5 to 4x5 feet apart, requiring 2900 or 2178 plants per acre. They bear most freely on 2 and 3



HOUGHTON

year wood, so pruning should maintain a continuous supply of vigorous wood. Much of the disappointment in growing gooseberries has been due to using English varieties, which in America are especially subject to mildew. We offer only American varieties.

**HOUGHTON**—The old standard variety; bush drooping, hardy and prolific.

**DOWNING**—Larger than the Houghton, roundish; light green, juicy, fine quality; bush more upright than Houghton.

**INDUSTRY**—Very large English Gooseberry. Complete failure.

**PEARL**—The finest berry we have tasted; very large, round, juicy, extra quality. Small two year bushes of this grand new variety; tried here, were covered with berries, which measured one inch in diameter.

## CURRANTS

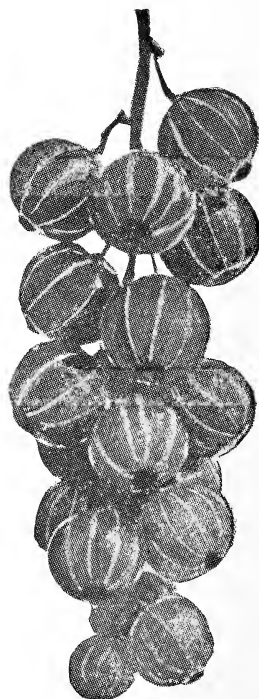
The Red currant is not adapted to this climate; the Black one is all right.

**CRANDALL**—Very large Black Currant, originated by A. Crandall, of Newton, Kans.; bears young, regularly and very abundantly; needs no protection; fruit sweet, huckleberry flavor, very juicy. Ripens early.

**FAY'S PROLIFIC**—Large clusters, and one of the finest of Red Currants.

**RED DUTCH**—The old standard variety or Red Currants. Well known.

**POMONA**—New red currant, said to be better than all other red currants.



RED DUTCH

## MISCELLANEOUS

**DOWNING EVER-BEARING MULBERRY**—Beautiful round-headed, vigorous blossoms to ripe fruit, at the same time; fruit one to one and a half inches long; bluish black, rich, sprightly flavor. Much finer than the old time Mulberry.

**BISMARCK APPLE**—Budded on dwarf stock, bears second and third year, and fruits well on high upland where other apples are a failure. A small dwarf tree.

**HUCKLEBERRY (Dwarf Juneberry)**—Bushes four to six feet high, perfectly hardy; stands drouth and heat; fruit juicy, mild, subacid.

**RHUBARB**—Linneaus has very large stalks; early, tender, hardy and best of all for this climate.

**ASPARAGUS**—Very fine for early table use. We handle two year crown plants, which will throw up sprouts for use the first year.

**HORSE RADISH**—Too familiar to require description.

## SHADE TREES

**SHADE TREES**—Soft Maple, Elm, Carolina Poplar, Sycamore, and Speciosa Catalpa we recommend as best for lawn and street planting. Common Catalpa worthless.

**BUNGEI CATALPA**—A perfect umbrella tree, with large, dense, heart-shaped foliage; the umbrella top being grafted on a standard tree stock. The hardiest and most bountiful lawn tree introduced in the West. See colored plate.

**WEeping WILLOW**—Beautiful, but requires much water.

**TEAS WEEPING MULBERRY**—The hardiest weeping tree known; endures both heat and drouth.

## FOREST TREE SEEDLINGS

Small seedling plants ten to thirty inches, suitable for groves and wind breaks, of all leading forest trees.

**RUSSIAN MULBERRY**—Introduced by the Russian Mennonites. Trees very hardy, standing 40 degrees below zero and still bearing a crop of berries. A splendid tree to plant for windbreaks, or around orchards, as the birds will leave other fruit to get the mulberries. Good to plant in chicken yards. Fruit used with other berries, or rhubarb, makes excellent sauce and is fine to eat raw. Wood makes excellent posts, lasting for 20 years or more.

**BLACK LOCUST**—A large native tree of rapid growth. Especially valuable for posts, as the trees grow to post size quicker than any other hard wood and last for many years. Very hardy and is a profitable variety to plant for timber plantations. Thrive on most any kind of land.

## CATALPA SPECIOSA

One of the most valuable of all Forest Tree Seedlings. For best results should be planted on somewhat better ground than is necessary for Russian Mulberry or Black Locust. The wood is very valuable for practically any use. Makes the very best of fence posts, railroad ties, etc., and is just as good for interior house finishing or furniture, as the grain is beautiful and takes a fine polish. This wood is lighter than pine; stronger than oak, and tougher than hickory. A Catalpa Grove on every farm would prove a splendid investment.

**Plant Nothing but the Pure Catalpa Speciosa.**—There is no variety of Catalpa that is profitable to plant but the Speciosa. There are a number of varieties of "scrub catalpa" that are absolutely worthless from a commercial standpoint, as they never gain sufficient size to be of value and they are slow to mature, crooked, and in all ways practically worthless. The Catalpa Seedlings that we are offering are absolutely pure Speciosa. We know where every pound of our seed is gathered and plant nothing but the pure Speciosa. Don't take chances on getting scrub varieties on account of a little difference in price, for you cannot afford to wait from eight to ten years for a grove and then find you have one that is of no value.



UNITED LITHO. & PR. CO., ROCHSTER, N. Y

## BUNGEI CATALPA

One of our most beautiful ornamental trees; very hardy. The large, dark green, heart shaped leaves; the perfect umbrella top, which retains its symmetrical shape without pruning, and the general attractiveness of the "Bungei" make it one of the most desirable ornamental trees we know of.



**PYRAMIDALIS**—Species for Arborvitae; upright grower, foliage thick with an appearance of having been pressed; beautiful and hardy.

**NORWAY SPRUCE**—Symmetrical grower, foliage short, spine half inch long; retains its color in winter. Rather hard to grow.

**AUSTRIAN OR BLACK PINE**—Large, robust tree; foliage a dark, glossy green, spine form three inches long. Our best and hardiest pine for the west.

**RED CEDAR**—Well known, perfectly hardy and a vigorous grower.

**CHINESE GOLDEN DWARF**—Of very dwarf, compact habit, the hardiest of its class. In winter the foliage is a beautiful bright green, in summer intense gold suffused with green. Unexcelled for garden or cemetery use; the very best for window boxes and tubs. The best of the dwarf golden Arborvitaes.

**JAPAN QUINCE**—Thorny bush, earliest in spring, with crimson flowers.

**SYRINGA (Mock Orange)**—Symmetrical bush, six to ten feet, very profuse bloomer; blossoms white, yellow center, filling a yard with their sweet fragrance.

**HYDRANGEA (Paniculata Grandiflora)**—Large bunches of pure white blossoms one foot in length. A fine shrub.



GEN. JACQUEMINOT

**Weigela Rosea**—Vigorous bush covered with beautiful rose colored flowers in June. Beautiful, rare and rich.

**Weigela Candida**—Resembling the above, except flowers are white. rant, two varieties, purple and white

**Lilac**—Profuse bloomer, fragrant, two varieties, purple and white.

**Snowball**—Improved variety, blooms profusely second year.

**Althea (Rose of Sharon)**—Improved double varieties of purple, red and white. Small trees, bloom in August and September when other flowers are scarce.

**Smoke Tree, or Purple Fringe**—A hardy tree with a feathery bloom, resembling curls of smoke.

**Honeysuckle**—White, sweet scented, changing to yellow, and the old fashioned red.

**Wisteria**—Hardy climbing vine, with large, single, blue bunches of blossoms.

**Clematis Jackmannii**—Large, deep purple blossoms two to three inches in diameter.

**Clematis Paniculata**—Flowers pure white in large panicles. Very fragrant and a rapid, strong grower. Perfectly hardy.

**Spirea Van Houtti (Bridal Wreath)**—Best of all Spireas. When in bloom it is a perfect fountain of white blossoms, the foliage hardly showing. Perfectly hardy. Very beautiful for the lawn.

**Privet**—Small plants, of best varieties, for lawn borders or hedge, vigorous, forming beautiful and almost evergreen in first year.

**Barberry Thunbergi**—Japanese Barberry (Berberis). An invaluable little shrub that fits in with almost every planting. Will grow anywhere and has handsome foliage of bright green oval leaves, that turn to the most brilliant shades of orange and red in the fall. The slender, graceful branches, which are protected by small thorns, are lined with scarlet berries of great attractiveness

from early autumn until well into winter. Makes the most beautiful ornamental hedge of anything we know of.

## ROSES

**THE TEA ROSES** are beautiful, delicate, everblooming roses, but are not hardy for outdoor planting, though they can be grown by laying the bush down and covering with dirt in the winter.

**THE HYBRID PERPETUALS AND CLIMBERS** are very hardy for outdoor planting, and our list of large, rich colors, of profuse bloomers is very fine, and these we recommend for general planting.

### HARDY ROSES

**LA FRANCE**—A hardy Hybrid Tea Rose; delicate, silvery pink, large, double, with an extra pleasing, attractive form, fragrant; blooming constantly from early until late.

**METEOR**—A hardy Hybrid Tea; very dark crimson red; one of our greatest everbloomers.

**DUKE OF WELLINGTON**—Bright velvet red, beautiful rich red of fine form.

**GENERAL WASHINGTON**—A large double red rose. Bush thrifty and hardy.

**KAISERIN AUGUSTA VICTORIA**—There is none finer. Pure white, hardy, and an excellent bloomer. Does best in very rich soil and should be well pruned.



Kaiserin Augusta Victoria

**BABY RAMBLER**—This is a dwarf form of the old favorite Crimson Rambler. Blooms continuously throughout the whole summer. Plants are vigorous and grow to a height of about 18 inches. Especially desirable for borders or use in boxes.

**MRS. J. H. LANG**—A bright pink, very fragrant, blooms the entire summer. One of the best.

**MAGNA CHARTA**—Grown on our grounds for the last six years, surpassed all other roses for growth; rose a bright pink, large double.

**ULRICH BRUNER**—Large double flowers, of a bright showy red; very hardy.

**MAD. PLANTIER**—An old summer variety, blooming in June; flower double pure white; very hardy and suitable for a cemetery rose.

**COQUETTE DES ALPS**—Largest flowers of everblooming white roses, pure white, sometimes tinted with pale red.



**GEN. JACQUEMINOT**—One of our great favorites; scarlet crimson, large, especially showy, fragrant. Blooms in early summer and fall.

**DUKE OF EDINBURGH**—An old standard, hardy, dark red.

**PAUL NEYRON**—Hardy plant. The largest rose in cultivation; deep pink, blooms in June and fall.

**DINSMORE**—Dwarf bush, large, double, scarlet crimson, fragrant, blooms freely and constantly.

**MAD. CHAS. WOOD**—A bright red, everblooming, hardy, and highly recommended.

## HARDY CLIMBERS

**SEVEN SISTERS**—Blooms in clusters, red when first in bloom, changing to pink; usually two colors.

**PRAIRIE QUEEN**—A very hardy, beautiful climbing rose, deep pink, blooms in summer.

**MARY WASHINGTON**—A small white rose, half climbing, blooms profusely the entire summer.

**EMPRESS OF CHINA**—A medium size pink; profuse everblooming climbing rose.

**BALTIMORE BELLE**—White climbing rose with pale blush.

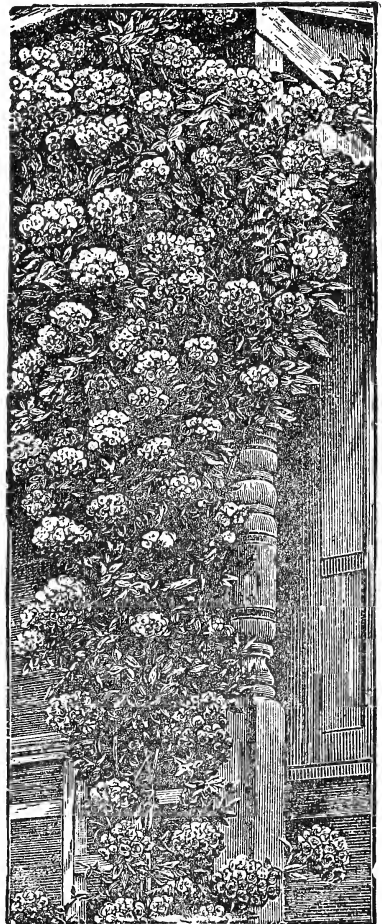
**CRIMSON RAMBLER**—This new Japan rose is the greatest acquisition and novelty among roses; one year bush produced seventy-five blossoms. Climbing rose of very rapid growth, small light green leaf, flowers one inch in diameter; crimson red, produced in large clusters, often so profuse that the whole vine seems one bright red banner, trimmed with green leaves.

**WHITE RAMBLER**—Climbing rose; small double, white; produced in clusters like crimson.

**YELLOW RAMBLER**—This very hardy rose is a rapid climbing vine, light yellow. Beautiful in selection with other ramblers.

**DOROTHY PERKINS**—A very popular climbing rose. Beautiful bunches of small pink flowers produced in great profusion. very hardy and good in all respects.

**EVERBLOOMING CRIMSON RAMBLER**—Of the famous Crimson Rambler family. Continues to bloom until killing frost; flowers are the brightest crimson, in great trusses, combined with the waxy, pale green foliage, making a beautiful plant. Flowers are produced on the ends of new shoots, and if cut off as soon as faded, many new branches are formed, which are soon covered with flowers. Very hardy, having stood very hard winters. The most popular of the Rambler family.



Everblooming Crimson Rambler

## SUGGESTIONS TO PLANTERS

Success depends in a large measure on the treatment given the stock after it is received by planters. Avoid all unnecessary exposure to the air. As soon as received, it should be healed in, so that mellow earth will come in contact with the roots. When planting take out but a few at a time. One hour of exposure to hot sun or drying wind is sure death to many trees.

Cut off the end of all bruised or broken roots with a sharp knife, making a clean cut. If it be a standard tree for the orchard, trim it up to four or five limbs, suitable to form the top, and cut each of the side limbs back to a bud four or five inches from the body of the tree, leaving the leader or central limb from eight to twelve inches long. When there are no side limbs suitable for this purpose, the tree should be divested of all its branches and headed back to a proper height to form the top.

In properly preparing ground the holes need not be dug much larger than necessary to receive the roots in their original position, but it is always best to dig some distance below the roots and refill with surface soil. In planting in sod, the holes should be dug three times the size necessary in well plowed land. Remove all label wire from the trees, that it may not cut the branches. As soon as planted, five or six inches of coarse manure or other litter should be spread over the ground about the tree, four or five feet in diameter; this will keep the surface moist and aid the tree in dry weather.

No grass or green crops should be raised among the fruit trees until they have attained bearing size.

**"Healing in" stock received in the fall:** To insure success, you have only to get the trees before freezing weather and bury them in the following manner:

Choose a dry spot, where no water will stand during the winter, with no grass near to invite mice. Dig a trench, throwing out enough dirt to admit one layer of roots below the surface, and place the trees in it, inclined at an angle of 45 degrees or more. Widen the trench, throwing the soil among the roots in position, placing another layer in the trench, reclining the tops on the others, and so on until all are in the trench; then water thoroughly. Finish by throwing up more soil until the tips of the trees are fully covered. It is also well to bank up the earth around the sides to insure more thorough protection. Care should be taken to fill solid all the interstices among the roots. Too much care in doing this cannot be insisted upon, as every root which is not in close contact with the soil is sure to be killed. In the spring the trees will be on hand for transplanting at the earliest moment possible to do the work.

Fall planting is advised, however, instead of "heeling in," for experience has demonstrated that not one in ten succeed in heeling in.

### Care of Trees When Frozen

If the trees are received in a frozen state, place the package unopened in the cellar, away from the frost and heat, until thawed out, and then unpack. Trees handled in this way will not be injured by freezing.

### Number of Trees Sufficient to Plant an Acre

Feet	Trees	Feet	Trees	Feet	Trees
1 by 1.....	43,560	8 by 8.....	680	16 by 16.....	170
2 by 2.....	10,890	9 by 9.....	537	17 by 17.....	150
3 by 3.....	4,840	10 by 10.....	435	18 by 18.....	134
4 by 4.....	2,722	11 by 11.....	360	19 by 19.....	120
5 by 5.....	1,742	12 by 12.....	302	20 by 20.....	108
6 by 6.....	1,210	13 by 13.....	257	25 by 25.....	69
7 by 7.....	888	14 by 14.....	222	30 by 30.....	48
		15 by 15.....	193		

### Distances for Planting

Standard Apples .....	30 feet apart
Standard Pears .....	25 feet apart
Dwarf Pears .....	10 feet apart
Standard Cherries .....	15 feet apart

Plums, Peaches, Apricots.....	15 feet apart
Currants, Gooseberries, Raspberries, Rhubarb.....	4 feet apart
Quince and Grapes.....	10 feet apart
Asparagus .....	3x4 to 6 feet apart

The number of plants required for an acre, at any given distance apart, may be ascertained by dividing the number of square feet in an acre (43,560) by the number of square feet given to each plant, which is obtained by multiplying the distance between rows by the distance between plants.

## When to Spray

**Apple Trees:** For prevention of leaf blight, spraying with bordeaux mixture or ammonical carbonate of copper as soon as the leaves are full grown. To destroy aphid or plant lice, spray with kerosene emulsion as soon as the pests appear. To destroy the codling moth, canker worm and curculio, spray with Paris green or London purple,  $\frac{1}{4}$  pound in forty or fifty gallons of water, soon after the blossoms fall, and again two weeks later. To destroy web worm spray with London purple or kerosene emulsion from August 1st to 10th, or as soon as pests appear. This application should be made during the middle of the day, when the worms are out of their webs and feeding on the leaves.

**Cherries:** Treatment same as recommended for apple.

**Pears:** The pear slug can easily be destroyed by spraying with Paris green, 4 ounces to 50 gallons of water, or with kerosene emulsion, as soon as the slug begins operations. Pear and quince blight can be destroyed by spraying with bordeaux mixture. The codling moth and curculio should be treated same as recommended for apple trees.

**Plums:** Destroy the aphid with kerosene emulsion and a fine-spray nozzle. The curculio can be destroyed by spraying with 3 ounces of Paris green to 40 gallons of water. First application should be made as soon as blossoms have fallen, and repeat at intervals of a week or ten days. Four applications should be sufficient. Other enemies of the plum will be destroyed by this method, but in all cases be particular to keep the poison and water constantly stirred.

**Peaches:** If attacked by the black peach aphid, spray with kerosene emulsion. The plum curculio frequently attacks the peach, in which case spray with Paris green, 2 ounces to 50 gallons of water. Be sure to keep it well stirred and use with caution. Never use London purple on peach trees.

**For Grape Rot and Mildew:** Use bordeaux mixture.

**Currants and Gooseberries:** To destroy the worms, spray with powdered Hellebore, one ounce in three gallons of water, as soon as the worms appear. To destroy the yellow aphid, spray with kerosene emulsion early in the season. To prevent mildew, use one-half ounce potassium to one gallon of water.

## Spraying Formulas

**Kerosene Emulsion:** In making kerosene emulsion for spraying trees for lice, be sure and follow the correct method. Dissolve in two quarts of water, one quart of soft soap or one-fourth pound of hard soap by heating to the boiling point then add one pint of kerosene oil and stir violently for from three to five minutes. This may be done by using a common force pump and putting the end of the hose back into the mixture again. This mixes the oil permanently, so that it will never separate, and it may be diluted easily at pleasure. This mixture should be diluted to twice its bulk with water, or about fourteen times as much water as kerosene. The kerosene emulsion is successful in destroying cattle lice and sheep ticks, as well as varieties of plant lice.

**Bordeaux Mixture:** Six pounds of sulphate of copper are dissolved in six gallons of water. In another vessel four pounds of fresh lime are slaked in six gallons of water; after the latter solution has cooked, slowly turn it into the other solution and add ten gallons of water. This, when all is thoroughly mixed and strained, is ready for use. In straining the mixture, reject all of the lime sediment, using only the clear liquid. Strain the whitewash through a coarse gunny sack stretched over the head of a barrel.

**Copper Sulphate Solution:** Copper sulphate, 1 pound; water, 15 gallons. Dissolve the copper sulphate in the water, when it is ready for use. This should never be applied to foliage, but must be used before the buds break. For peaches and nectarines use 25 gallons of water. Use for fungous diseases.

**Paris Green:** Paris green, 1 pound; water, 200 gallons; if this mixture is to be used upon peach trees, 1 pound of quicklime should be added. Repeated applications will injure most foliage, unless lime is added. Paris green and bordeaux mixture can be applied together with perfect safety. Use at the rate of 4 ounces of arsenites to 50 gallons of



the mixture. The action of neither is weakened, and the Paris green loses all caustic properties. Use for insects which chew.

**Hellebore:** Fresh white hellebore, 1 ounce; water, 3 gallons; apply when thoroughly mixed. This poison is not so energetic as the arsenites, and may be used a short time before the sprayed portions mature. Use for insects which chew. Can also be used dry by dusting on plants.

**London Purple:** This is used in the same proportion as Paris green, but as it is more caustic it should be applied with two or three times its weight of lime, or with bordeaux mixture. The composition of London purple is exceedingly variable, and unless good reasons exist for supposing that it contains as much arsenic as Paris green, use the latter poison. Do not use London purple on peach or plum trees unless considerable lime is added. Use for insects which chew.

**Lime, Sulphur and Salt:** Stone lime, 15 to 30 pounds; flowers of sulphur, 15 pounds; salt, 15 pounds; water, 50 gallons. Slake the lime in a small quantity of hot water, gradually adding and thoroughly stirring in the sulphur. Dilute the mixture with 12 gallons of water, and boil in an iron kettle or cook by steam in a covered tank or barrel for one and one-half hours. Then add salt, continuing the boiling for one-half hour more. Fill vessel up with water to the required 50 gallons. Strain wash through a fine-mesh strainer and apply hot. In using an iron kettle, keep the mixture vigorously boiling and thoroughly stirred to prevent caking and burning of materials. Wash cooked by steam is more easily prepared and better made. Apply wash just as the buds begin to swell in the spring. Cover all parts of the tree with a heavy coat of the wash. The wash seems best adapted to orchardists who have not yet learned to use petroleum with safety or are afraid that their trees are beginning to show injury from the oil, or will not stand many more applications of it. It is especially recommended for the treatment of peach trees. It is believed that the substitution of one and one-fourth pounds of blue vitrol dissolved in hot water for the salt results in quicker-acting wash. This formula is known as the Oregon wash. Use for scale and fungous diseases.

Any of the agricultural experiment stations will furnish bulletins so arranged that the grower may see at a glance what to apply, when and how to make the application.

### Some Satisfied Customers

Fargo, Oklahoma; April 1, 1914.

Cooper & Rogers,  
Winfield, Kansas.  
Gentlemen:-

The trees received in fine shape and I am much pleased with them. They are about the finest I ever received. I shall always speak a good word for Cooper & Rogers. Thanks for the premium sent.

Yours truly,  
Geo. W. Williams.

Washington, Kansas; April 9, 1914.

Cooper & Rogers,  
Winfield, Kansas.

Dear Sirs:-

Got the shipment of fruit trees yesterday. Was in splendid condition and a No. 1 lot of trees. I am sure well pleased with my first order from you.

Thanking you for the extra trees, I am,

Yours truly,  
J. W. Graves.

Peck, Kansas; April 11, 1913.

Cooper & Rogers,  
Winfield, Kansas.

Dear Sirs:-

The bill of fruit trees you shipped arrived on time and in the best of condition.

I can say that during the thirty years I have been buying fruit trees—as many as four thousand trees—I have never seen finer trees than the two hundred and fourteen you last shipped me.

Of course I am well pleased with the trees. It will be a pleasure to me to recommend your firm to anyone in need of trees.

Yours very truly,  
R. J. Hukle.



